PUBLIC HEALTH

LONDON: THE SOCIETY OF MEDICAL OFFICERS OF HEALTH
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No. 8.-Vol. LXVI. MONTHLY PRICE 2s. 6d. ANNUAL SUBSCRIPTION 31s. 6d. MAY-1953

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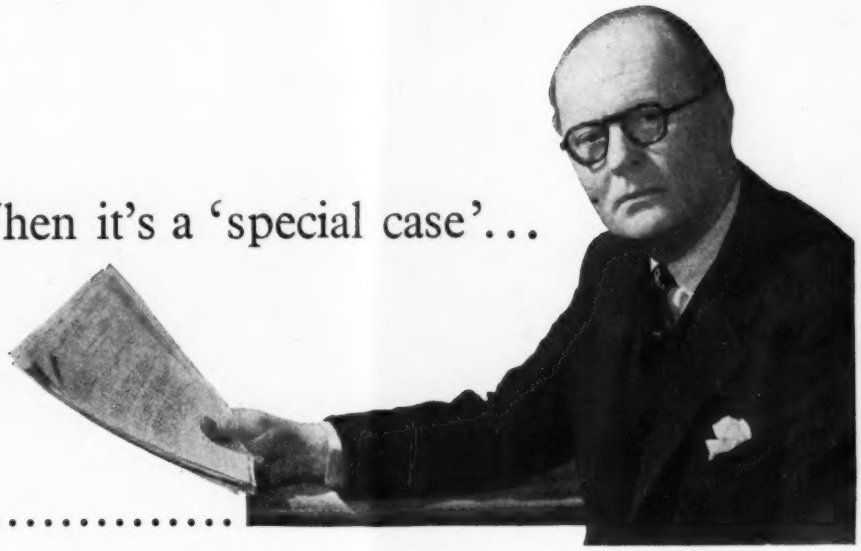

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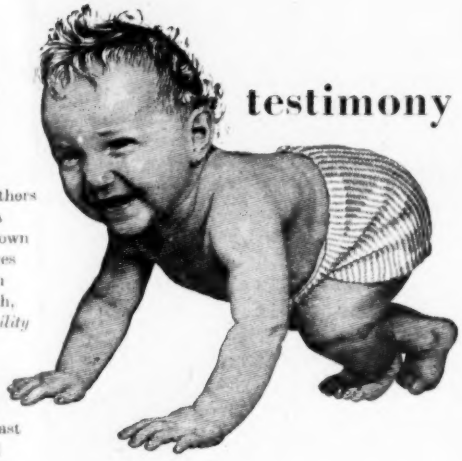

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No. 8. Vol. LXVI MAY, 1953

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EDITORIAL

The Geography of Hunger

Josué de Castro, chairman of the executive of F.A.O., has produced in "The Geography of Hunger,"* a much-needed answer to the pessimistic and cynical Vogt whose "Road to Survival" held no true message of hope for a world advancing in numbers to the tune of 50,000 a day. Here is the answer to all the neo-malthusians who regard humger, starvation, and death as the inevitable consequence of the peopling of the globr. Under-nourishment is the chief cause of excessive birth- and death-rates with the balance always on the side of increasing numbers. The remedy of such excessive and wasteful fertility as is to be found in all the poorly nourished parts of the world is not, primarily, deliberate limitation of families; the remedy is better feeding. But, say the neo-malthusians, what does this benefit us even if true when the productive capacity of the world's soil is unequal to the task of producing for everyone a daily average of 3,000 calories with a proper balance of protective foods and essential nutrients. This target, they say, is impossible to-day and becomes daily more so. To this De Castro's answer is a categorical denial. The earth's productive capacity, if fully employed and adequately served by scientific knowledge, is more than equal to the task not only of feeding the existing 2,400,000,000, but of many more, even 10 times this number.

Nevertheless, the task which faces mankind is one of exceptional difficulty. But if the truth of De Castro's hypothesis that under-feeding causes over-population, and not *vice versa*, could gain general acceptance, the chance of international collaboration would be immeasurably increased.

"The Geography of Hunger" is a highly documented statement of nutritional deficiencies and diseases throughout most of the globe, excluding Russia. The book is equally prolific in political judgments which everyone will not be prepared to accept. He indicts the colonial policies of all nations, without exception, blaming industrial greed which thinks in terms of cash crops and ignores the food needs of the people who produce them. It often seems that the author fails to emphasise sufficiently that the new knowledge of nutrition is still little understood outside scientific circles. Many still believe that a good load of carbohydrate provides an adequate diet. The hopelessly inadequate regime of the West Indies—and in fact of all areas subjected to a monoculture to the exclusion of varied food production—has been imposed as much through ignorance as greed. Here is the opportunity for Britain, with her unique experience in the past 15 years of successful biological feeding, to show the way to the rest of the world. The new knowledge of nutrition must be rapidly and generously applied throughout our own colonial Empire. We are always glad to note the emphasis placed on this subject at the London School of Hygiene and Tropical Medicine.

* Gollancz, London, 1952.

Tuberculin Testing amongst School Children

A recent editorial in *The Medical Officer** made reference to the part which the School Health Service can play in the elucidation of problems associated with the epidemiology of some common skin infections. In the same issue of the *British Medical Journal* which included Prof. Cruickshank's article on that subject, there is an article† by Dr. I. A. MacDougall and others on "Tuberculosis Case Finding by Tuberculin Testing of Infant School Children." The detailed work in Bournemouth was carried out by the staff of the chest clinic and no doubt there were good reasons for this. But we suggest that such work can quite properly be regarded as part of the duties of an assistant school medical officer; it would provide useful and interesting work for him and would constitute true preventive medicine. It seems to us that there are many opportunities for this specialised type of investigation, and we suggest that the School Health Service may shortly have to consider its attitude to special investigations which are highly desirable, if not absolutely necessary. The question seems to be whether they should be carried out by members of the School Health Service as part of their ordinary duties or by the hospital staff coming into the schools.

If medical and nursing staff are sufficient, there will be little difficulty in combining the "stock" duties with special investigations, and we are aware that a number of such investigations are carried out by S.M.O.s each year. The results seldom seem to appear outside the pages of annual reports and therefore are unrecognised by the greater part of the profession. But departments are faced with the necessity of curtailing or abandoning one of these types of work. It may well be that the majority of S.M.O.s are of the opinion that the quiet and unspectacular work of regular medical inspection is the foundation of the School Health Service and that special investigations of the type we have mentioned are rather in the nature of secondary frills. Would this matter be a fit subject for discussion by the School Health Service Group of the Society?

* Epidemiology of Skin Infections. *Med. Offr.* (1953). **89**, 83.

† *Brit. Med. J.* (January 10th, 1953). **1**. 64.

THE ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH*

Commentary in Retrospect, 1895—1924

By H. J. PETERS, M.B., B.S., B.HY., D.P.H., D.P.A.,
Medical Officer of Health, Borough of Stockton-on-Tees

In the United States of America, difficulty in coping with the output of official documents has stimulated a large number of colleges and universities to inaugurate courses for the purpose of training people to read faster. Though the wisdom of this solution is questionable, there is no doubt that the difficulty it seeks to overcome is a very real one which, of recent years, has become more acute. The weight of literature confronting us in the course of our duties is considerable and to this is added a seemingly inexhaustible flow of technical papers. Preoccupation with current literature is so great that little or no time remains for the pursuit of the medical literature of the past. We therefore tend to neglect the writings of our predecessors which are often of very great interest and worthy of more attention than they sometimes receive.

The occasion of this Presidential address affords me the opportunity of recalling some of the many interesting matters reviewed in the annual reports of one of my predecessors, Thomas Horne, who was Medical Officer of Health for Stockton-on-Tees from 1895 to 1924.

The estimated population of Stockton-on-Tees in 1895 was 54,000 and the number of births 1,630, giving a birth-rate of 30·8. The number of infant deaths was 330, giving an infant mortality rate of 202·4 and the total number of deaths was 1,003, giving a general death-rate of 18·5. In this year there were 187 notified cases of typhoid fever, with 21 deaths ; 732 cases of scarlet fever, with 31 deaths ; and 29 cases of diphtheria, with 12 deaths. No cases of smallpox or typhus fever were notified.

In the report for 1923, the last of Dr. Horne's reports, we find that the estimated population was 66,610 and the number of births 1,663, giving a birth-rate of 24·96. The number of infant deaths was 126, giving an infant mortality rate of 75 and the total number of deaths was 797, giving a general death-rate of 11·96. There were four notified cases of enteric fever with one death ; 211 cases of scarlet fever, with two deaths ; 51 cases of diphtheria, with four deaths ; and 25 cases of smallpox with no deaths. The latter were cases of variola minor, which was then becoming prevalent.

Infectious Diseases

The notified cases of smallpox during the years 1895 to 1922 inclusive totalled 30. Sixteen of these cases occurred in 1898, one in 1899, six in 1903, four in 1904, one in 1906, and two in 1922. None of the cases proved fatal. The methods adopted to prevent extension of the disease were immediate removal of patients to the smallpox hospital, disinfection of the premises concerned, including bedding and clothing, and vaccination or revaccination of all contacts and members of the public " who could be prevailed upon to accept the protection." The epidemic of 1898 extended from February to May, the first patient being infected on a visit to Middlesbrough, where an epidemic " raged so furiously . . . as to attract the attention of the entire country, and to spread consternation not only among the townsfolk of Middlesbrough itself but also among the inhabitants of adjacent districts."

The report for 1903 mentions that in the previous annual report :

" it was stated that arrangements were in readiness for promptly dealing with any case of smallpox that might occur. The introduction of smallpox into your district necessitated these arrangements being put to practical test on six separate and distinct occasions during the past year; I am glad to add always with good results. In no instance did the disease spread."

The third case of smallpox in 1903 was a man who applied to the relieving officer for medical relief. This officer suspected smallpox and informed the district medical officer, who telephoned the health department. The Medical Officer of Health, accompanied by a sanitary inspector, visited the patient.

" When interrogated, the sufferer, who was extremely ill, made the most confused statements, mentioning Newcastle, Sunderland, Hartlepool, Manchester, Salford, and Liverpool, among many others, as places where he had recently been. When pressed for precise information he became so irritable that further attempt had to be relinquished. After his admission to hospital three tram tickets were found in his clothing, and these . . . were the means of tracing his movements."

" Great credit," wrote Dr. Horne, " is, I think, due to the relieving officer who made such careful observation and acted so promptly. Before the man had been in Stockton 24 hours and, while what proved to be a very virulent attack of smallpox was yet in a very early eruptive stage, the case was effectively isolated through his instrumentality."

A photograph of the patient, showing a very profuse eruption, appears in the Annual Report with this comment :

" The sufferer willingly gave me permission to make any use I may think proper of a photograph I took of him. It may enable those having no acquaintance with smallpox to picture to themselves what a loathsome disease it is."

Fifty years ago measles, whooping cough, and diphtheria caused a very high mortality especially in children under the age of five years. In 1904 the Medical Officer of Health expressed regret that measles and whooping cough were not notifiable, and declared, " I should recommend the notification of measles even if it were only for the purpose of exercising some supervision over the cases." Whooping cough caused a high mortality in children under the age of one year and the report for 1912 records that " as is almost invariably the case, 50% of the deaths from whooping cough occurred under one year of age."

The role of the unrecognised case in the spread of diphtheria was well understood.

" It is surprising," stated the report for 1900, " how frequently one is driven to the conclusion that the main cause of the spread of the disease is the comparatively large number of mild cases which pass quite unrecognised. . . . Cases of the disease, benign in themselves, but nevertheless capable of passing the disease on to another are, from time to time, overlooked even by careful and skilful medical attendants—and for this very sufficient reason : that it is impossible to recognise the milder cases of diphtheria without the aid of bacteriological diagnosis."

In 1902 the diminished case mortality was attributed to the more frequent adoption of serum therapy. The importance of giving antitoxin early and in sufficient amount was repeatedly stressed in the reports. As late as 1919 the Medical Officer of Health complained that in too many instances diphtheria antitoxin was not used promptly and also felt it necessary to point out that " The method of giving the remedy by mouth, as is sometimes done, is unsatisfactory."

A public health laboratory service was established in 1900 and the Medical Officer of Health recorded this event in these words :

" A most important arrangement has been made between the County Council of Durham and the College of Medicine, Newcastle upon Tyne, whereby any registered medical practitioner within the administrative County of Durham is now enabled to have bacteriological examinations made at the bacteriological laboratory, College of Medicine, Newcastle upon Tyne, in doubtful cases occurring in his practice of diphtheria, enteric fever, and phthisis. The County Council will pay the whole of the fees. . . . There can be no doubt that this should be of very great value, both to health authorities and the public health. It is well known it is impossible to diagnose with certainty from clinical features alone many doubtful cases of the diseases mentioned, and in such instances bacteriological examination is of the highest value."

At first only meagre use was made of the service and succeeding annual reports draw attention to its great value. In 1905 the Medical Officer of Health remarked, " It is,

* Presidential address to the Northern Branch, Society of Medical Officers of Health, November, 1952.

I consider, a matter of extreme regret that advantage is not taken of this aid to diagnosis much more frequently."

The mortality from scarlet fever, though still high compared with modern experience, had fallen in the early part of the century. We are told that the case mortality rate in 1910 was very low, namely, 1·4—"a happy circumstance which indicates that the present type of the disease is extremely mild, and very different to what I have had experience of where virulent epidemics have been attended by 30 to 40% of fatal cases." The report for this year also referred to the affinity between scarlet fever and many cases of sore throat :

"In past years, when inquiring into circumstances surrounding cases of scarlet fever, I have learnt of the more or less coincidental occurrence of cases of sore throat. . . . I have been convinced that these cases of sore throat are more often than not scarletinal in nature."

To demonstrate his point, Dr. Horne quoted the case of a family in which two of the children had been notified as suffering from scarlet fever. On investigation, he found another child aged 14 years had been under recent medical treatment for a sore throat, the father was suffering from quinsy, and the mother had recently complained of a sore throat. Within a week three other children in the family developed scarlet fever. The Medical Officer of Health then "sought a consultation with the notifying practitioner with the result that he was convinced equally as I was that the initial case in the household had been that of the boy 14 years of age, and likewise that the father's sore throat was in reality a manifestation of scarlet fever."

During the 10-year period, 1891 to 1900, the average number of cases of enteric fever occurring each year in the Borough was 138. At the commencement of the present century the incidence of enteric fever was falling and in 1906 the Medical Officer of Health wrote: "The occurrence in a single year of half a hundred cases of a disease which should have no local origin or maintenance, can be considered satisfactory only to the extent that the number of such cases is less than it was a few years ago." The report for 1903 tells us, somewhat to our surprise, that "there is a mischievous idea abroad that typhoid fever is not infectious and that little or no danger is run by treating a case of this disease at home."

"My view on the subject," states the Medical Officer of Health, "is plainly recorded in a previous report, but I think it well to quote . . ., from an able paper by Dr. J. T. C. Nash, contained in the last volume of the *Transactions of the Epidemiological Society of London*." The quotation reads: "It is astonishing and almost incredible that, so recently as 1900, it should have been necessary for this Society to hold a discussion on the infectivity of typhoid fever, and for Dr. Goodall to have to point out some of the leading text-books taught that there was no risk in nursing typhoid fever patients and no necessity for removing a typhoid fever patient to hospital. It really seems past belief that anyone who had had to deal with the administration of a fever hospital, or with any considerable number of typhoid fever patients, could have escaped both the experience and conviction that the disease was infective in the absence of intelligent nursing and efficient disinfection."

The annual report for 1918 refers to the special report, prepared by the Medical Officer of Health, on the influenza epidemic which began in May of that year and continued until the end of January, 1919, causing 231 deaths. The special report deals with 218 deaths which occurred in 1918. Of these deaths a greater proportion occurred in the age period 25 to 45 years than in any other of the age periods ; 77% of the deaths were in persons under the age of 45 years and 93 of the 218 deaths were of females over 15 years of age, the majority of whom "appear to have been engaged in domestic duties." In the three central age-periods, 5 to 15 years, 15 to 25 years, and 25 to 45 years, female deaths preponderated over male deaths to the extent of 20%, 74% and 40% respectively. In the remaining four age-periods deaths among females were either equalled or slightly outnumbered by deaths among males ; 61% of the 218 deaths occurred in females.

Environmental Hygiene

At the time of Dr. Horne's appointment health departments were paying considerable attention to environmental hygiene and he, like his colleagues in other areas, waged constant warfare against the midden-privy. His report for 1897 makes this reference to the matter :—

"My own opinion regarding the unhealthiness of the present method is well known and need not be repeated here. It is infinitely better I should take the opportunity and quote the opinion of the highest official authority England possesses on public health at the present day. Sir Richard Thorne Thorne, principal medical officer to the Local Government Board, speaking on October 21st, 1897, said: 'The fact that with our present knowledge such a structure as the common midden-privy should not only still exist in our midst but be clung to with a perverted tenacity, is in my opinion the greatest blot which attaches to English sanitary administration at the close of the 19th century. Apart from its sanitary aspect, it is a system as degrading and ignoble as it is foul, and I trust the day is not far distant when we shall look back to it as a barbarism of the past.' These are no uncertain words and, coming as they do from the trusted adviser of Her Imperial Majesty's Government, could hardly fail to carry conviction to any but the most inflexible sceptic."

The annual reports convey a vivid picture of the discomforts and health hazards engendered by this method of excrement disposal. In the operation of night scavenging the filth from the privies was conveyed to the street, deposited in heaps, and then transferred to carts for removal. The streets were afterwards flushed with water. In many instances the filth from the privies had to be conveyed through dwellings and it was not till 1910 that the town's inhabitants were "at last free from the risk of injury to health, which is inseparable from night soil being conveyed in scavenging operations through dwellings."

In 1900 the Medical Officer of Health recorded that "an increasing proportion of the community are showing greater and greater preference for water closets in place of privies." In 1906 he reported that the most important improvement in the new houses being built was apparent in the system of excrement disposal :—

"In place of the disgusting and doubtless dangerous midden privies water carriage is for new property fast becoming universal, if indeed it has not already become so. This development makes it reasonably possible for the dwellers to maintain an atmosphere around their houses relatively pure and free from stale faecal and other offensive odours which with the common midden privy is a condition practically impossible to secure." The report for 1908 announced further progress and stated that "for the first year on record no privies or pan closets have been built in connection with new houses. . . . More convincing evidence of the redemption of the public in regard to its views on sanitary conveniences than this could hardly be desired."

The abolition of the midden privy system was not accomplished without reverses. In 1912 the Medical Officer of Health wrote :—

"The policy of adopting measures that have for their object the abolition of the dangerous and disgusting midden privies that abound in your district may with truth be said to have encountered during many years much vicissitude. Always consistently defended by a few, ever oppugned by others, and ordinarily regarded with indifference by many, the policy has now and again occupied the crest of a wave of steady progress. At other times it has been in the trough and again it has at times receded in an actual backwash."

Though much had already been accomplished progress was greatly accelerated following the Council's resolution of 1912 that existing midden privies, pan closets and pail closets were to be systematically replaced by water closets. The first World War interrupted the work and it was not completed till 1926.

Housing

The Medical Officer of Health, in his first annual report, drew attention to the prejudicial effect on the health of a community, of overcrowding and insanitary conditions in and about dwellings, by citing these conditions as among the principal causes of epidemic diarrhoea, which caused

131 deaths in 1895, 126 of the deaths occurring in children under five years of age. He also quoted these remarks from the 47th annual report of the Registrar General :—

"Scarlet fever is, for some reason or other, most destructive in the industrial, and especially the mining, counties . . . the explanation that naturally suggests itself is that, probably, the population in industrial and mining counties live in more than averagely close aggregation, and that the spread of infection is thus facilitated."

The provision of adequate housing accommodation for every family is the most urgent social problem of our time. The report for 1901 comments on this problem in words which, 50 years later, are still appropriate. "This subject," states the report, "is of national importance and any district which neglects to add its quota of improvement to the common stock will unquestionably be liable to severe reflections from a sanitary standpoint."

In the years immediately preceding the first World War there was no shortage of houses. Thus in 1908 there were 647 and in 1911 910 empty houses in the Borough. The senility of some of the houses and the industrial depression were the reasons advanced for the large number of empty houses. It was a common practice for two families to occupy one dwelling with a view to the saving of rent and rates. In 1910 the number of empty houses had fallen by 100 and this was regarded as an indication of improved industrial conditions. New houses continued to be built in spite of the large number of empty ones, and the majority of them had a fitted bath.

Whereas there was "no dearth of housing accommodation" before the war, there was an acute shortage after it. In 1919 it was estimated that 1,780 houses were required to relieve the shortage. Overcrowding had become so general that any attempt to alleviate it in one house could only have created it in another.

Problem Families

In 1903, as now, problem families were a source of great anxiety to the health department and the Medical Officer of Health, in the following words, records a visit paid by him to a household one February morning of that year between 9 and 10 o'clock : "The household comprises parents, five sons and three daughters. The dwelling, which contains four rooms, is situate in a comparatively open locality, and is by no means a dwelling of the worst type to be found in Stockton. The picture seen was far from an uncommon one. Both house doors were shut. Immediately on entering, one experienced a stuffy, foul atmosphere. Every window throughout the house was tightly closed and, excepting that in the kitchen, each was covered by a drawn blind. A good portion of the kitchen window, which looks upon a small yard, was carefully occluded by rags, the glass being broken. The mother of the family seated on a broken chair near the table, one child upon a dilapidated couch, another standing near the table, and three other children sitting or squatting on the fender or floor, were breakfasting. The kitchen was extremely dirty and littered with fragments of all kinds. Not the slightest pretence to order was shown in the meal. A loaf of bread, a broken plate with butter upon it, some slices of sausage upon paper, a few odd, imperfect pieces of ware, a tin of condensed milk, and sundry other articles, were scattered in confusion on the coverless table, which itself was far from clean. None of the inmates of the house had as yet been washed. The feet of some of the children I had occasion to examine (on account of scarlet fever) resembled the rind of dirty smoked bacon more than living integument. The upstairs rooms of the dwelling were equally neglected. Two of the family were still in bed. The bedding can only be described as repulsive. It was not surprising there was sickness in the house. One child was said to be always a sufferer with 'sore eyes.'

"The mother, when expostulated with, argued that her family had had 'a lot of attention this week!' Well meant advice, and the object lesson of showing my own naked foot, appeared to provoke demurral, rather than conviction of the truth of my teaching. I may add the father of this family, and his eldest son, are in constant work, so that poverty cannot be pleaded as an excuse for these insanitary conditions."

Recourse was had to the provisions of the Infectious Diseases (Prevention) Act and an order to cleanse and disinfect the premises was served. The Medical Officer of Health remarked, "I shall not be much surprised, however, if after the temporary close surveillance which is being paid at present is relaxed, a short lapse of time is sufficient to allow a similar state of things to that described to present itself again."

His report tells us that it was only with difficulty he rid his mind of the idea that it would be a good thing were it possible to bring additional penal force of some sort to bear upon those who apparently will make only the feeblest (if any) effort to help themselves. He ultimately concluded that "just as it is impossible to make a man sober by Act of Parliament, so it is impossible to make people clean by legislation, and reliance has to be placed on education to bring about a better state of things."

Health Education

Dr. Horne's annual reports reveal his very keen appreciation of the fundamental importance of health education, and the potential value of the elementary schools, in training the rising generation to appreciate from childhood the nature of those influences which injure physical and mental health.

In 1900, commenting on the large number of infant deaths, he expressed the opinion that

"ignorance is in very preponderating proportion the chief cause of such deaths. It follows, therefore, that the problem of their prevention can best be solved by adopting as a motto the word 'educate'—and acting upon it. . . . I am of the opinion that good would follow if school authorities could be induced to arrange for the instruction of the senior classes in girls' schools, in matters of hygiene and in the principles of feeding and care of infants. Such a course has been adopted in Stockport and several other towns with, I believe, very considerable benefit."

"It is to be hoped," states the report for 1903, "now that the control of elementary education is being transferred to the local authority, the potentiality there is for good in arrangements to ensure that every child shall receive elementary instruction in the laws of health will not be lightly passed by."

We also learn from this report that the Council of the British Medical Association were about to make representations to the Board of Education with a view to securing the inclusion "in the curriculum of the public elementary schools, and to encourage in the secondary schools, such teaching as may, without developing any tendency to dwell on what is unwholesome, lead all the children to appreciate, at their true value, healthful conditions as regards cleanliness, pure air, food, drink, etc." The Society of Medical Officers of Health proposed to make similar representations to the Board.

Writing of the value to the rising generation of health education, the Medical Officer of Health, in his report for 1905, asked : "Cannot more be done than is being done ?" The same question may profitably be put to-day and justifiably answered in the affirmative.

In 1906 the Medical Officer of Health returned to the theme of health education with the words,

"I have repeatedly expressed my opinion that the greatest hope of reducing infantile mortality lies in education. . . . This education to have immediate result, requires to be offered to present mothers ; but the future harvest is to be ensured in greatest plenitude by educating mothers of futurity in the laws of health."

He illustrated the soundness of the view that health education promises a rich harvest by quoting from the *Morning Post* of November 26th, 1906, the following extract dealing with the Huddersfield Experiment :—

"The Huddersfield Experiment, whose results were announced only a few days ago, in one of the most remarkable as it should certainly be one of the most fruitful social experiments ever attempted. It consisted simply in giving a promissory note for

£1 to every baby born within a certain year, payable on its living 12 months, and in then making this promise the excuse or the occasion for a small band of voluntary lady workers to visit the mothers of the babies and give them good advice as to the feeding and management.

"In Longwood, the suburb of Huddersfield to which this experiment was confined, the infant mortality rate for the 10 years preceding was 122 per 1,000. For the year of the experiment, in itself a peculiarly unhealthy time, the rate was 35, or assuming one baby, whose parents had removed without trace, to have died, was 44 per 1,000. A reduction of infant mortality to far less than one-half of the former proportions was the immediate consequence of a little regular skilled advice to the mothers. The experiment is on a small scale, yet, so far as it goes, it is conclusive both as to the general causes and the remedial character of infant mortality. It is in entire agreement with all the medical testimony as to the physical soundness of the race, with the view, that is, that the vast majority of babies were born healthy, and only die in such numbers through insufficient care."

Health Visiting

In his report for 1901, the Medical Officer of Health, when dealing with the value of education in the prevention of infant deaths, remarked, "that a most important proposal . . . which should assist in this education to an appreciable extent is, while I am writing, in a fair way of becoming consummated—I refer to the proposal to appoint a lady inspector or health visitor."

The first health visitor was appointed in 1902. She gave advice on the feeding and general care of infants and young children, reported on sanitary defects in houses, visited cases of measles, gave lectures on health subjects to women and girls, and inspected all workshops in the district where females were employed. After the Notification of Births Act was adopted by the Council in 1908, her work was chiefly in connection with the visiting of homes from which births had been notified under the Act, though for some time she continued to visit workshops where females were employed, and from 1909 visited patients notified under the Tuberculosis Regulations of 1908.

A multiplicity of duties exercised by one individual, rather than the dispersal of duties among a multiplicity of staff, characterised the functions of this officer. Whilst I do not for a moment suggest it would be appropriate or desirable for health visitors to perform the duties of sanitary inspectors, you may agree that in public health administration the pendulum has now swung too far in the direction of multiplying staff as new functions arise, and too little in the direction of endeavouring to concentrate new functions among existing staff.

When the first health visitor took up her duties she possessed the certificate of the Royal Sanitary Institute but had had no nursing experience. In 1905, however, she obtained leave of absence in order to receive training at the Newcastle Lying-in Hospital in the nursing of mothers and in the care and management of infants. She gained the certificate of this hospital in nursing and also the certificate of the Central Midwives Board. In her annual report to the Medical Officer of Health she records that she found this training of great value in her work. She had concluded, as a result of experience gained in the performance of her duties, that whatever other qualifications a health visitor might possess, it was essential that she should have had nursing experience.

Generally speaking, the health visitor was welcomed by mothers and, as was to be expected, she encountered much ignorance. "In my opinion," states her report for 1908, "the mothers are all anxious to do their best for their babies, but they are extremely ignorant . . . and they find it extremely difficult to yield the traditions of their grandmothers to the facts of modern hygiene. . . . It will take years of patience and perseverance to eradicate these errors to any appreciable degree."

The Medical Officer of Health had no doubts as to the very great value of the health visitor's work. In 1909 he wrote: "Her work and the improvement in the infantile mortality rate stand to one another to a certain extent in the position of cause and effect." Commenting in 1914 on the reduced infant mortality he stated: "It is I think quite reasonable to claim that this saving of lives was largely if, indeed, not mainly, the result of work in connection with health visitation."

For six years prior to 1908, when the Notification of Births Act came into force, there had been a scheme of health visiting which was, however, severely limited in scope owing to the absence of means for acquiring early intelligence of births. The Medical Officer of Health compared the infant mortality rate for three six-yearly periods, 1896 to 1901 (no health visiting), 1902 to 1907 (limited health visiting), and 1909 to 1914. He found that "had the infantile mortality rate during the period 1909 to 1914 continued at the same level as during 1902 to 1907, 123 infants would have died who did not die, and that, had the rate been the same as during the period 1896 to 1901, no less than 465 infants would have died who did not die."

Infant Mortality

The annual reports make frequent reference to the value of breast feeding as a means of reducing infant mortality. Thus in 1903 the Medical Officer of Health pointed out that the substitution of artificial for the natural nourishment of infants was a most potent cause of infant mortality, and declared: "How fatal the consequences of such substitution are was well illustrated at the time of the Siege of Paris, 1870 to 1871. While the sufferings and starvation which this entailed doubled the mortality among the general population, that among infants was reduced by about 40% owing to mothers being obliged to suckle their infants. A similar fall in the rate of infantile mortality was noticeable at the time of the Lancashire cotton famine, when mothers, obliged to stay at home, nursed their babies instead of relinquishing that duty for work at the mills. The comparatively favourable infantile mortality rate of Dublin is ascribed, no doubt with accuracy, as largely due to the fact that it is more generally the practice of mothers in that city to fulfil their maternal duties in respect to suckling their young than it is in many others."

In the same report the mortality ascribed to overlaying is referred to in these words:—

"It appears to me, that the man who elects knowingly to sit on a barrel of gunpowder to smoke his pipe, is less culpable than the mother who courts the accident of overlaying her child often is. In one case, the man accepts the risk himself of his own free will, but in the other matter, the risk of suffocation is imposed upon the child by one who should be able to adopt a practice that would render such an event wellnigh impossible."

At that time the importance of a detailed pathological examination before deciding that death is due to accidental mechanical suffocation was not appreciated. It is worth noting that in 1909 when, in the words of the health visitor, "the use of separate sleeping accommodation for the infant is an almost unheard of practice," only two deaths were ascribed to overlaying. In 1951, when the majority of infants had separate sleeping accommodation, three deaths were ascribed to this cause. In both years the deaths occurred in infants under the age of one year. The number of births in 1909 and 1951 was 1,421 and 1,402 respectively.

The danger to infants and others from the consumption of contaminated milk was attracting considerable attention and in 1904 the Medical Officer of Health recommended "municipilisation of our milk supply."

"I have recently," he wrote, "through the courtesy of Dr. E. M. Hope, Medical Officer of Health for Liverpool, had the pleasure of reading an account of municipal depots established in that city for the supply of milk for the feeding of infants whose mothers are unable to suckle them. In the mortality returns it is stated that among infants fed on the milk supplied from these depots the death rate is only 78 per 1,000 as compared with 150 per 1,000 for infants in the whole of the City of Liverpool."

In the early years of the present century diarrhoeal diseases had an important influence on infant mortality. "With the exception," wrote the Medical Officer of Health in 1911,

" of premature birth and congenital defect which necessarily exert their influence on vitality so soon as birth is an accomplished fact, there are no diseases more worthy of attention in connection with infantile mortality than diarrhoeal diseases, and this is so not merely because this class of diseases is the cause of a greater number of infant deaths than any other, but because it is a class that admittedly can be largely controlled by practicable measures."

This report then refers to the value of breast feeding and adequate sanitation in the prevention of diarrhoea among infants. In regard to the former, it asserts that, " investigations into the circumstances that attend excessive infantile mortality prove indubitably that breast feeding, as opposed to artificial feeding, is the first supreme condition of the safe rearing of infants." It was, indeed, of supreme importance at a time when the dried milk preparations, with which we are now so familiar, did not exist, and when methods of artificial feeding were so often unsuitable and inadequate. In regard to defective sanitation the report states that " the highest diarrhoeal death-rates are, generally speaking, recorded in localities where sanitation is least advanced, and especially where conservancy methods of disposal of excrement are known to prevail."

At a time when diarrhoeal diseases were so prevalent among infants, the infant mortality rate was significantly affected by climatic conditions. In 1912 the rate was 91, by far the lowest ever recorded in the Borough, and the report of the Medical Officer of Health makes this comment :—

" There can be no question that the conditions of climate that prevailed more or less throughout the year were favourable to infantile health. More particularly may the moderate temperature and the frequent rain showers, experienced during the third quarter of the year, be properly regarded as the causes that contributed, more than any others, to the production of so satisfactory a general infantile death rate as 91. As explained in previous reports, hot and dry weather favours the multiplication and dissemination of micro-organisms that are causal of the diarrhoeal illness that is so fatal among infants. The saving of infant life during the past year was mainly due to the absence of this fatal malady."

In 1911 the hottest and driest year for a century, 41 infants under one year died from diarrhoea, whereas during 1912 only eight such deaths occurred.

The annual report for 1912 quotes from the address given to the National Conference on Infant Mortality by the Right Hon. John Burns. He pointed to the 32·5% reduction in the infant mortality rate that took place in the 66 years 1846 to 1912. Of this reduction no less a proportion than 30% was achieved in the last six years of that period. This reduction was due, in the words of John Burns, " to a stream of causes, many experiments, and endless ideas, all converging on how to protect the mother, save the infant, guard the child and reinvigorate the race."

The Medical Officer of Health, when dealing with this address, wrote that, " of the components of this complex ' stream,' the Notification of Births Act, 1907, received first honourable mention, next health visitors, then the enforcement of sanitation, better housing, better feeding of children, improved quality of the literature that deals with child hygiene, fewer illegitimate births, the change that has taken place from horse to mechanical traffic and the accompanying improved road surfaces, attention to milk and milk shops, and greater sobriety of the people, were in turn each and all credited with a share in having brought about such satisfactory results as have been indicated."

The Stockton and Norton Babies Welcome Society, a voluntary organisation whose object was the conservation of infant life, established a child welfare clinic and antenatal clinic in 1910. These were the first clinics of this type to be established in the town. Previously, mothers had been able to have their babies weighed by appointment with the health visitor. The Society employed its own staff and also enjoyed the cooperation of the Council's health visitor. In 1916 the Borough Council took over the work of the Society.

In 1919 the Council opened a municipal maternity home and the annual report records this event in these words :—

" It is quite safe to affirm that neither the merited victory of a first favourite, nor the unexplained win of a rank outsider, could have provided an event for Stockton Race Week, 1919, more deserving of preservation in the archives of the ancient borough than did the opening of the Robson Maternity Home by the Marchioness of Londonderry."

A quotation in the same report from H. Jellett, ex-master of the Rotunda Hospital, Dublin, throws into sharp relief the valuable contribution made by modern drug therapy in the spectacular reduction of mortality from puerperal sepsis which has occurred since sulphonamides and penicillin became generally available. The quotation reads :—

" It is not an exaggeration to say that the most essential knowledge in midwifery is the knowledge of asepsis. A practitioner who knows nothing of the science and art of midwifery except that it is necessary that his hands and instruments are sterile will save more lives than the most accomplished obstetrician who does not practice asepsis."

By virtue of the improved position in relation to the acute infectious diseases and the reorganisation of the hospital service under the National Health Service Act, 1946, the isolation hospital in Stockton has now become a children's hospital which will be fully developed as rapidly as economic circumstances allow. The need for a children's hospital was first mentioned in 1918 and is also referred to in subsequent reports. In the report for 1918 we are informed that " a great want in the district is a children's hospital, and the question of utilising the Council's smallpox hospital for the purpose was under discussion on several occasions, but no decision was arrived at." Thirteen years earlier, as we shall see, the Medical Officer of Health had recommended that cases of respiratory tuberculosis should be admitted to the smallpox hospital.

Tuberculosis

In 1903 the Medical Officer of Health expressed the opinion that although 20 years had elapsed since the discovery by Koch of the tubercle bacillus, the mortality " from this widespread disease is not diminishing in Stockton at so desirable a rate as could reasonably be hoped." He recalled that in his report for 1898 he " set forth at some length the chief measures which any crusade against consumption, to be successful, peremptorily demands." These measures included adequate ventilation, prevention of overcrowding, sufficient food, a safe-milk supply, and care by the patient in the disposal of expectoration. They are still of the utmost value and modern developments in the diagnosis, treatment and control of tuberculosis, should not blind us to their fundamental importance.

A plea was made in 1904 for notification and the provision of sanatorium accommodation. In this connection the Medical Officer of Health asked : " Why should phthisical people be permitted to scatter their complaint broadcast, when efficient supervision and advice would do much to prevent the spread of a disease that is a national scourge ? "

The report for 1905 points out that only Sheffield possessed powers of compulsory notification. These had been obtained by means of a local Act in 1903. Many places, however, had a system of voluntary notification. At Brighton, for example, where Arthur Newsholme (later Sir Arthur Newsholme, Medical Officer of the Local Government Board) was Medical Officer of Health, voluntary notification by medical practitioners was adopted in 1899 and in 1902 provision was made for the sanatorium treatment of a certain number of early cases in the vacant wards of the isolation hospital. The patients remained in the hospital for a month and were educated in open-air methods, and then returned home and often to work, with instructions to destroy all expectoration, and to keep up free ventilation night and day by open windows and unstopped chimneys. Six months later, if these instructions had been satisfactorily carried out, they were admitted for a further month of sanatorium treatment. The patients were so conscious of the benefit derived that they were eager to qualify for this further term of treatment.

THE SOCIETY OF MEDICAL OFFICERS OF HEALTH

Notice of Ordinary Meeting

Notice is hereby given that an Ordinary Meeting of the Society will be held in the Council Chamber of the B.M.A., Tavistock House, Tavistock Square, London, W.C.1, on Friday, May 22nd, 1953, at 12.45 p.m., immediately following the meeting of Council.

AGENDA

1. Minutes of the Ordinary Meeting held on April 17th, 1953.
2. Correspondence.
3. Election of the President of the Society for the Session 1953-54, on the nomination of the Council.
4. Election of Fellows and Associates.
5. Nominations.
6. Any other business.

S. R. BRAGG,
Administrative Officer.

Tavistock House South,
Tavistock Square, W.C.1.

TUBERCULOSIS GROUP

The Annual Meeting of the Group will be held in the Committee Room of the Society on Friday, May 15th, 1953, at 12 noon.

J. G. S. McQUEEN,
Hon. Secretary.

Battersea Chest Clinic,
St. John's Hospital,
London, S.W.11.

MATERNITY AND CHILD WELFARE GROUP

The Annual General Meeting will be in London on Friday, June 12th, followed by an evening trip by launch on the Thames to see the floodlighting. Full agenda will be sent to each member of the Group.

DORIS CRAIGMILE,
Hon. Secretary.

52, Mount Park Road,
Ealing, W.5.

NAPT

NAPT HANDBOOK OF TUBERCULOSIS ACTIVITIES IN GREAT BRITAIN AND THE COMMONWEALTH

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by

G. S. WILSON, M.D., F.R.C.P., M.R.C.S., D.P.H.,
Director, Public Health Laboratory Service, Medical Research Council.

J. W. S. BLACKLOCK, M.D., F.R.F.P.S.
Professor in Pathology, St. Bartholomew's Hospital Medical College, London.

L. V. REILLY, B.SC., M.D., D.P.H.
Bacteriologist to the Northern Ireland Tuberculosis Authority.

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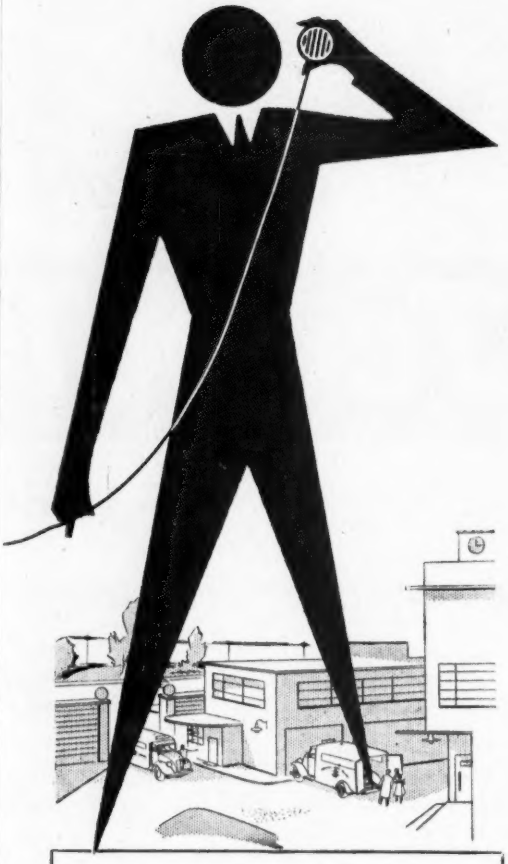

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Quotations from the special report on sanatorium treatment prepared by Arthur Newsholme are included in the Stockton annual report for 1905. Newsholme's report details the advantages of this form of treatment and points out that "patients as a rule have been treated for only four weeks, the idea of training the patients and preventing risk to others having, in view of the primary functions of a sanitary authority, been kept in the foreground. If more patients could be treated and for longer periods, much greater good could be done."

In 1905 the Medical Officer of Health recommended the use of the smallpox hospital for the treatment of pulmonary tuberculosis or, alternatively, that his Council should subsidise a number of sanatorium beds for this purpose. The estimated cost of the latter proposal was £75 per bed per annum. The question of accommodating cases of pulmonary tuberculosis in the smallpox hospital was under discussion on several occasions. In 1911 the matter was left in abeyance because of the National Insurance Act. Thereafter the provision of sanatorium treatment became the responsibility of the county council.

The full text of the memorial, dated January, 1906, prepared by the National Association for the Prevention of Consumption is contained in the annual report of the Medical Officer of Health for 1906. This memorial, lengthy and comprehensive, offered valuable suggestions to public authorities. These suggestions included voluntary notification, the provision of hospital and sanatorium accommodation, and the establishment of tuberculosis committees. The memorial recommends that unoccupied accommodation in isolation hospitals, workhouse infirmaries, and smallpox hospitals might, with due precautions, be used for tuberculous patients. Some of the accommodation was to be used for the isolation of advanced cases and some for educational sanatorium work. It is of interest to note that in 1950 the Minister of Health, in a circular addressed to Regional Hospital Boards and Boards of Governors, asked these bodies

"to apportion for the admission of respiratory tuberculosis patients as many beds as reasonably possible in suitable general hospitals. It is desirable that they should be in a separate section or block, and in any event in separate wards. Boards are also asked to consider to what extent they can arrange to use beds in isolation hospitals not required as essential epidemic reserves."

The final words of the memorial emphasise the duty of prevention and point out that "every special precaution against consumption is a general precaution against all infectious diseases; and at the same time conduces to the maintenance of the health and vigour of the entire community." The last paragraph reads as follows :—

"Every year bears testimony to the lowering of the death-rate, and to the improvement in the public health brought about by Parliamentary sanitary enactments and municipal by-laws, interpreted and carried out by health authorities from the local government board downwards. It is the conviction of the National Association for the Prevention of Consumption that a further great opportunity lies ready to the hand of public authorities by the recognition of consumption as a contagious disease which can be prevented. They have it in their power to further the realisation of the dictum of the King that 'if preventable it ought to be prevented'."

The report for 1907 deals at some length with bovine tuberculosis. Two Royal Commissions had been appointed, the first in 1891 and the second in 1896, to consider the effect, if any, of food derived from tuberculous animals on human beings. One of the findings of the first Commission, as Dr. Horne reminds us, was that "the largest part of the tuberculosis which man obtains through his food is by means of milk containing tuberculous matter." "The conclusions of this Commission," he continues, "were so clear and free from ambiguity that administrative action throughout the country directed to the prevention of tuberculosis through food received their deep impress, being guided or formulated by the report of the second Royal Commission which was appointed for this purpose."

In this report the Medical Officer of Health refers to the view on bovine tuberculosis expressed by Koch in 1901.

"Suddenly," the report tells us, "a sensational statement was made by Professor Koch at the International Congress of Tuberculosis held in London in the summer of 1901, which cast some doubt upon the equity of the action taken by heath authorities in connection with tuberculous meat. He opined that bovine and human tubercle bacilli were distinct species, and that the infection of human beings from a bovine source 'is but a rare occurrence.' So opposed to the hitherto generally accepted conclusions and so condemnatory of the prevailing administrative measures was this statement, that an irresistible demand for the fullest possible inquiry was provoked and a third Royal Commission was appointed." The Commissioners after exhaustive research, issued an interim report in 1907 which disclosed that "a very considerable amount of disease and loss of life, especially among the young, must be attributed to the consumption of cow's milk containing tubercle bacilli." The Medical Officer of Health remarked of this report that "stronger corroboration of what may be styled orthodox opinion, in respect to the danger of consuming as food, meat and milk derived from an animal affected with tuberculosis than is here adduced can hardly be imagined, and there can be no doubt that more stringent measures guarding against the danger are urgently needed."

The report of the Medical Officer of Health for 1919 expresses concern at the failure to notify cases of tuberculosis. "It is no uncommon thing," the report states, "to receive a notification of pulmonary tuberculosis bearing a date that is subsequently found to coincide, or very nearly coincide, with the date of the death of the patient. Surely this is a sorry application of the tenets of preventive medicine." The application of the tenets of preventive medicine, in so far as the notification of tuberculosis is concerned, still falls short of what is desirable and indeed most necessary, if the machinery of prevention is to function efficiently. The report for 1950, of the Chief Medical Officer of the Ministry of Health, Sir John Charles, reveals that one death from tuberculosis in every six occurs in persons not notified before death.

Conclusion

In conclusion, may I quote again from the address delivered by John Burns to the National Conference on Infant Mortality which the Medical Officer of Health in his report for 1912 described as "a characteristic, forceful and picturesque speech." This speech, despite the passing of 40 years, despite the great reduction in the infant mortality rate and in other mortality and morbidity rates, and despite the enormous expansion of our health services and our social services, still contains a valuable message for all those who desire the further improvement of the public health.

Here are the concluding sentences of a memorable oration

"Go on with all the remedies, by all the agencies, to remove all the causes that endanger the life of the child. The much attempted, the amount achieved, is the measure of what there is to do. Without pedantry, without doctrinaire views, as to which is or is not the best method, try them all. With practical application of sympathy improve the houses of the people, improve their food, raise the too low wages of the poorly paid, make their environment better than it is. Add to the nursing, give comfort to the expectant mother, and when her trouble is over give her for her child's sake the best you can afford. All this is worth doing. The stream of life is no purer than its source. The source is motherhood. Purify, dignify, and glorify motherhood by every means within your power. Exalt the mother and you elevate the child. Do this in no heroic, sentimental, or doctrinaire way, but with the sustained chivalry of applied common sense address yourself to the health of the infant, the happiness of the mother, and the invincible and undying vigour of the great race to which we belong."

The Proposed Change of Name of the Society

It is requested that Fellows who propose to complete the ballot paper on this question will do so and return their papers to the central office of the Society, Tavistock House South, Tavistock Square, London, W.C.1., to arrive not later than Friday, May 15th.

PHYSICAL DISABILITIES AND MALADJUSTMENT*

By H. A. T. CHILD, B.A.,
Senior Educational Psychologist, London County Council

First, I should like to remind you that, at birth, *all* children are in some sense physically handicapped. One outstanding characteristic of the young of the human race is its marked and prolonged incapacity to look after itself, and in consequence the infant is utterly dependent for food, warmth and comfort on its parents, especially the mother. And thereby, as we all know nowadays, of course, hangs a long psychological tale. For along with that utter dependence there goes an equally strong emotional tie-up between a baby and his mother. The firmness and strength of this primitive emotional bond know no limits and the process of growing from infancy into childhood and beyond is, from the emotional point of view, never an altogether easy one. The enlargement of a baby's emotional horizon to include first the father, then brothers and sisters, and finally people outside the family circle, and, moreover, the job of gaining control of his aggressive impulses towards others at the same time as he gives play to his affection towards them, are fraught with many difficulties, and it is in the interplay of these loves and hates that the foundations of character and personality are laid.

One need not offer one's adherence to Freudian or any other theory to appreciate this fact ; there is quite enough experimental evidence to convince us of the importance of the first years of life for emotional development, and we can easily see how, if things go wrong in these early years, serious results may ensue. The work of Bowlby on the effects of early hospitalisation or Spitze's film "Grief," showing the behaviour of babies when separated from their mothers, is convincing enough. The right relationships between parents and their young children and the right handling of the children's emotional development must be reckoned as a vital factor in the hygiene of the early years.

All this provides a key to the study of physical handicap. The child who is born with such a condition, or who comes to suffer one through disease in his early years, suffers in a sense from the prolongation of an emotional situation really appropriate only to the period of infancy. He tends to remain helpless and unduly dependent on his parents and the parents themselves may tend to cling to attitudes more appropriate to the handling of infants than to the handling of older children. Even in children who become physically handicapped at a later age, the same tendencies can often be observed, though usually not so marked.

Parental attitudes form a very important part of the picture ; they have a great influence on the child's own personal development and they may, if we are lucky, be open to modification through discussion.

There is, of course, a wide variety of attitudes observable among the parents of handicapped children. The simplest case, and one which fortunately is very uncommon, is that of open rejection, noticeable particularly among parents who are themselves of a highly unstable temperament or of very limited intelligence. Such parents may reject even normal children because of their nuisance value, and to have one in the family who is an even greater nuisance because of his physical disability may easily lead to dislike, to cruel comparisons and sometimes to actual physical cruelty. Fortunately, such a horrible situation is rare for it is quite devastating for a child and, in such circumstances, the only possible course is its removal to a more sympathetic environment, even though it can never provide sympathy equal to that of a normal home. Unfortunately, legal proof of rejection, and even of physical cruelty, is extremely hard to get.

The exactly opposite kind of attitude—that of the over-sympathetic and over-solicitous parent—is far more common and obviously preferable, but not necessarily the most desirable attitude. There are, fortunately, many people possessed with an almost inexhaustible fund of sympathy for the underdog. I am constantly amazed, in my dealings with parents of handicapped children, at their patience, forbearance and persistent kindliness towards a problem which must always be a burden and a handicap to them. Nevertheless, this great outpouring of sympathy and kindliness may come about in several different ways. It may come from a genuine sympathy but, on the other hand, it may arise from a quite unconscious rejection of the handicapped child. After all, from a purely rational point of view a handicapped child *is* a nuisance ; he is bound to involve much hard work and curtailment of adult liberty. Further, he is not likely to do his parents credit if and when he grows up and there is also sometimes a sense of social stigma involved in his presence in the family. The neighbours may look down on the parents because of his existence. But all these thoughts are unworthy thoughts on the part of the parent ; so unworthy that he cannot easily admit that he has them. He represses them and compensates for the fact that they are nevertheless still there in the back of his mind by giving extra care and kindliness to the child who has caused them.

There may even be deeper and more primitive mechanisms at work. Many of us are still as superstitious at heart as primitive savages, and it is quite possible that some parents of handicapped children feel unconsciously that the burden they have to bear is, so to speak, a direct act of God which has come as a punishment to them for their own shortcomings. In other words, unconsciously they feel guilty about it, and if so the only course open to them is expiation through a lifetime of care and devotion to the child.

All these possible mechanisms, which may be at work in the parental mind, emphasise the great difficulty that any parent of a handicapped child must have in arriving at a reasonable balance of attitude towards it and of keeping a reasonably consistent attitude in the face of many possible conflicts he himself experiences in the situation. They account, too, for the fact that many such parents make themselves martyrs over the child to a much greater extent than is really necessary ; they deny the child nothing, whether gifts or time and attention, and sometimes it is extremely hard to persuade them that firmness is just as necessary a part of a handicapped child's education as it is for a normal child. Again, however intelligent and cultured the parents may be, as the child grows up he is almost bound to catch disturbing glimpses of the warring impulses and conflicts which his parents suffer at times.

One very important factor, therefore, in the development of handicapped children is this one of parental attitudes. We cannot discuss the motives which underly these attitudes with most of the parents we have to deal with, but we can sometimes help them to modify their ways with the child a little and sometimes help to allay their anxieties, particularly when they do not always arise directly from the child himself.

Regarding the early hospitalisation of children, there can be no doubt now that, during the first few years of life, to be whipped away from the home and from the close protective arms of his mother—the only person, as we now know, with whom a baby has a strong emotional bond at this age—must be a devastatingly traumatic experience. The feeling such a baby is most likely to have is that his mother does not want him any more. He is, therefore, only too likely to see himself later on in the role of the rejected child and to act accordingly. If nothing happens to lead him to revise his opinion it may come about that the original feeling of maternal rejection gets transferred to all his friends and acquaintances and thence to humanity in general ; the deeply anti-social and potentially delinquent and criminal personality is created.

Obviously, this potential effect of hospitalisation is most powerful during the first years of life when the child has little or no reasoning power or grasp of language which can be used to soften the emotional shock. But even during the later years of childhood, to be taken away from the warm, emotional security of home life and immersed in the atmosphere and routine of hospital life, however kindly

*Address to the Refresher Course for School Medical Officers, London, September, 1952.

it may be, represents a considerable emotional strain ; its frequent repetition, as quite often happens, must tend to undermine a child's sense of security. Hospitalisation, after all, is not infrequently a strongly traumatic emotional experience for adults and it must be even more so for children.

Hospitals are becoming increasingly aware of this problem and many of them are doing a great deal by reorganising their routines and by encouraging frequent visits from parents to give their small patients a greater feeling of security. However, much still remains to be done. It seems to me very likely that a small child can by unwise handling be led to feel guilty at being in hospital—that he has been put there as a punishment. Such a state of mind may well considerably retard his physical recuperation.

Let us turn to the development of a physically handicapped child in his own home. A child born with a handicap does not realise the fact at first, for the situation simply results in the extension of the mother's physical care over a longer period of time than is usual with the normal infant. There must come a time, however, when he is forced to realise that he is not as other children, and when he reaches the age, say, from three to seven, at which play with his fellows begins to replace play with his parents or immediate brothers and sisters—an age in which an enormous expansion of his mental horizon takes place—he is bound to learn that he is something different and to feel that the difference is one of inferiority on his part. Children can often be consciously cruel towards one another : they will often hit a handicapped child, knowing that he cannot hit back, and still more often they can be unconsciously cruel. When it comes to choosing for games he will be the last chosen ; or he may not be chosen at all—" We can't have 'im ; he can't run." Worse still, he is only too likely to be taunted with a nickname appropriate to his handicap.

What will be his reaction to events of this kind ? Obviously to do as he has always done up till now ; to turn to mother for sympathy and consolation. And she has no choice if she is a normal woman, but to give it to him. She must find it very difficult ; perhaps impossible to tell him to " stand on his own feet," nor can dad easily encourage him to fight back when he is thwarted or annoyed by his fellows. Both parents will often feel obliged to step in and protect the child from other children to a much greater extent than they would if he were normal, and thus the infantile period of complete protection and dependence is extended, so that the physically handicapped child must find it very difficult to obtain real emotional independence from his parents until he is much older than usual. Some of them, indeed, may never attain it.

There is another aspect. All children have aggressive tendencies which probably arise from the inevitable thwarting of their primitive emotions in infancy. Normal children can express and give some outlet to their aggressiveness in their normal play, which is often of a highly competitive kind, and in the numerous bickerings, quarrels and even fights which constantly take place. But a physically handicapped child can seldom fight, or, if he does, can seldom do so effectively. He is discouraged or even prevented from doing so by adults and, in consequence, his aggressive tendencies get little chance of overt expression. They are turned inwards as phantasies and remain bottled up. Sometimes a child will find that he can give himself an outlet by becoming more and more, and unnecessarily, demanding on his parents and those who look after him—he " Plays them up," as we say. It is very difficult to know whether such demands arise from genuine physical need and therefore must be met, or whether they come from the child's unconscious desire to assert himself and should be discouraged.

One of the ways in which a physically handicapped child can assert himself is through drawing and painting. In schools, where " free expression " in art is encouraged, it is impossible not to be struck by the bloodthirsty content of the children's pictures, particularly the boys' pictures, at the early stages when skill has progressed from aimless colouring to the representation of a meaningful scene. Even with normal children, there is an abundance of blood and thunder at this stage ; bombs and guns, battles and corpses are strong favourites as themes and the colours often of lurid reds and blacks. But I remember that the first time I ever visited a school for physically handicapped children there was a class for seven- and eight-year-olds in which the teacher had encouraged " free expression," and the result had appalled her so much that she had put all her pupils' pictures away instead of hanging them on the walls. She showed them to me with some anxiety as she was beginning to feel that all her pupils were in a serious state of emotional disturbance in spite of the fact that, as a class, they were a typically quiet and friendly, if rather apathetic, set of physically handicapped children. Certainly those pictures were a revelation of what goes on in a quiet child's mind. There was more blood and murder to the square inch on the paper than one would think possible. I think you may well get more of it with these children than with normal ones because of their restricted opportunities of expressing their aggressiveness in other ways. And it probably does them good to put it all down on paper, though the controversial and intriguing topic of art therapy is hardly one which we can discuss here.

Finally, to complete the picture of the physically handicapped child's emotional development we have, as already mentioned, the worry of long or short periods of hospitalisation, accompanied frequently by painful treatment and attended by the emotional shock going with such a sudden change of environment. Even at home the thought that hospital treatment may be necessary hangs like a cloud in the child's mind and the anxiety in the parents' minds over the situation cannot always be hidden from him.

Taking the situation as a whole then, it is clear that it can seldom be a healthy one for a child's emotional development. The gradual realisation of his physical inferiority, sometimes rubbed in in cruel ways, sometimes unwittingly emphasised by a slip of the tongue on the part of adults, sometimes through a conversation unwittingly overheard, combines with the actual restrictions due to his handicap. Add to this the natural tendency to " over-mother " and " over-protect " and some disturbance of the personality is almost bound to happen.

Does this mean that every physically handicapped child is bound to become maladjusted ? If we take maladjustment in the narrower sense of the child with severe behaviour difficulties, who receives treatment at our Child Guidance Clinics, by no means. Surveys of physically handicapped children from the point of view have seldom been made and do not as a rule cover large enough numbers to be reliable as a guide, but I doubt if seriously maladjusted children occur among the physically handicapped to a markedly greater extent than they do among normal children. Although they grow up in a situation which obviously tends to be full of emotional strain, and sometimes very severe emotional strain, it may be that the extra care, kindliness and love they receive, as a rule, from parents and other adults help to counteract their tendencies to " go off the rails." Certainly, in nearly every case of serious maladjustment in physically handicapped children which I have come across there has been either complete rejection by the parents or a state of neurotic instability in the home which in itself would be quite enough to account for the child's emotional trouble. And, of course, this is what we nearly always find with normal children as well.

What you do get very commonly, however—and this is where I think nearly all teachers of physically handicapped children will agree with me—is a certain attitude to life which cannot perhaps be called maladjustment in the narrower sense, but in the wider sense of adaptation to life certainly is maladjustment. In discussing children in special schools with their teachers, certain words and phrases constantly crop up ; for example, " Apathetic," " No concentration," " Gives up easily." This, from what I have said, is understandable enough. Physically handicapped children are friendly enough, for they are used to

kindliness from others and expect it, they are seldom aggressive ; they do give way to short spells of temper when frustrated, but acts of violence towards others, stealing, lying and so forth are not common. On the other hand, they retire very easily into themselves and live in a dream world of their own and when faced with difficulties of any kind they tend to give up and expect help to be offered at once ; to struggle with a task or problem and to come out on top has, as a rule, less appeal than getting help from someone else as soon as anything appears to get difficult.

This brings us to another aspect of their development which I have not so far mentioned ; that is in the intellectual field. It is obvious that these temperamental weaknesses can manifest themselves strongly in the learning processes, so that the educational problems of physically handicapped are often serious. Now we know that there is a small number of diseases which, besides causing physical handicap, may cause intellectual impairment. This number is, however, small and I doubt if the range of intellectual ability in physically handicapped children differs markedly from that in the normal population. It is true that you find a larger proportion of educationally subnormal children among the physically handicapped, but that, in my view, is almost entirely due to the inadequacy of our methods of testing with children who may have even only a minor degree of handicap such as a stammer or slight deafness, nor do we always allow sufficiently for this temperamental tendency to give up easily which the children so often manifest. We are only now at the stage at which we are working out special techniques and special norms for testing the intelligence of such children.

But if they exhibit the normal range of intelligence, physically handicapped children are in a high proportion educationally backward. Frequent absence from school is one factor in the situation. To miss some of the essentials in learning the basic ideas in the formal subjects often means that a child never gets a grasp of them and suffers from such a gap for the rest of his school career. Further, many of our physically handicapped children have long and repeated spells in hospitals, where he may or may not have schooling, or residential schools, and each time he goes away he has to adjust to a new environment, to new teachers and possibly to new methods of teaching. The chance of gaps and hold-ups in his knowledge is, therefore, greatly increased.

But there is a further aspect of this problem. The first time a notable enlargement of a child's mental horizon occurs when he becomes mobile and begins to explore his material environment. In his manipulation of his toys, the furniture in his home, the contents of the coal scuttle and waste-paper basket, he is gaining a vast amount of knowledge. Besides practising the co-ordination of muscle, hands and eyes and ears, these explorations in space tell him a great deal about things and their properties ; he learns that things are round, or square, hard or soft, heavy or light ; he begins to learn, in fact, how to distinguish one thing from another by their characteristics, and at the same time, in his baby talk with his mother and family, he learns to attach verbal labels to the things he handles and touches—or is told not to touch. In this way the foundations of a vocabulary are laid and from this stage he proceeds through the nursery rhymes and jingles and stories to the mastery of language. Until this foundation is laid, a child cannot learn to read, for he is unable to attach meaning to a sufficient number of words to make the process anything but nonsense to him. One of the discoveries made in the last 20 years is that quite a number of normal children (particularly those from homes impoverished in culture) come to school without having reached this state of " reading readiness."

Now it is obvious that with children who are paralysed or palsied, or weak in sight or hearing, may be seriously handicapped in their capacity to explore their environment and their ability to attach meanings to words may be seriously distorted and restricted until they reach a much later age than normal. An extreme case is illustrated by the small girl in a hospital school mentioned in the recent survey conducted by the National Association for Mental Health, who, when asked to illustrate the nursery rhyme " Polly put the kettle on," objected that she could not draw a horse. It transpired on investigation that, because of long hospitalisation, the only meaning the child had been able to attach to the word " Polly " was " horse," for that was the name of the old nag who helped to cut the grass in the hospital grounds.

Now all this, of course, is mainly an educational problem, being as it is an important contributory factor to the almost universal backwardness of physically handicapped children. Nevertheless, it is a problem worth bearing in mind for it is obviously one, the seriousness of which may be greatly increased or diminished by the nature of the medical treatment which may be decided upon.

This brings me to my final point. What, in the light of what I have been saying, is to be learnt about the effect of our provisions on the emotional life of physically handicapped children ? Does it suggest the need for modifying what we do in certain circumstances ?

Obviously, first things first ; the amelioration of the physical effects of the handicap must be the prine consideration. And, of course, the nature and severity of physical handicaps and the possibility of response to treatment are so varied that it would be most unwise to lay down any rigid or general rules. But if there is one thing which seems to stand out as a desirable principle it is that, from the point of view of mental hygiene, out-patient treatment and treatment in the home are much to be preferred to in-patient treatment, particularly for younger children. Most of the children's hospitals and homes which deal with this problem are the kindliest places on earth, but however much they try to do for the children in the way of sympathy and kindliness, they must remain by their very nature a potential threat to sound emotional development : they can never prove themselves an adequate substitute for the family. There is a good deal to be done here, I think, in impressing upon parents the vital need for frequent visits and on some hospital staffs that though visits may appear to be disturbing to some children, that disturbance is only a symptom indicating that the emotional links between parent and child are still operative : the apathy of the unvisited child is a much more serious symptom.

Again, certain types of handicap may involve spells of varying length at a residential school ; for example, a residential open-air school. In many cases stays are not long —often only a term or two—but a child may have several spells of residence during his school years. Now, in addition to the fact that, at the younger ages, this may be very distressing, there is also the scholastically disturbing effect of many changes of school environment and of teachers ; it often takes a child a term to settle down in a new school environment, so that, however well organised a residential school may be, and however small the classes are, it may well be lucky if it does no more than prevent a child from going backwards scholastically. Moreover, in those borderline cases where a recommendation for residential treatment is a bit of a shot in the dark, consideration of a child's previous school history and progress might well be one of the factors which tip the scale one way or the other.

My final suggestion is that, in considering the treatment of physically handicapped children, the attitude of the parents towards the child and possibly and desirability of modifying that attitude should always be borne in mind. We can all accept the idea now that sound emotional relationships, especially within the home, make all the difference to the results of our therapeutic programme, and if in any way we can help parents to adopt a more healthy attitude, we may be doing a great deal for the child. It is very difficult to know just what that attitude really is ; if we do have an idea, it may be equally hard to know how we can make suggestions tactfully enough to be accepted. Again, every case must be considered in the light of its own special conditions. Nevertheless, I think there are cases and occasions when a word in season can help to relieve some of the

tension which is bound to arise within the family, whether that tension arises from genuine anxiety over the child's future or from deeper causes such as the parents' own feelings of guilt. If we can help them to see that the right and ultimately the kindliest way of handling a child is to be very kind, but only so very kind as the nature and severity of the particular handicap justify, and that to do more than this is really to be unkind, it will save a lot of children and parents a lot of trouble.

That the same rule applies with equal force to the more temporary stressful situations which arise with normal children emphasises that we are not here dealing with a race apart (an idea which it is very easy to slip into) but only with children who are placed by circumstance in a special set of disturbing physical circumstances and who are the more liable thereby to some alteration in their emotional attitudes to life.

USE AND ABUSE OF FILMS AND FILMSTRIPS IN HEALTH EDUCATION*

By HELEN COPPEN, B.A.,

Lecturer in Audio-Visual Aids, University of London

In your profession there has been a long tradition of using visual teaching materials successfully and a long tradition of using high quality material. Doctors have been teaching with pictures for a long time and they have been doing it well. My only excuse for talking to you at all to-day is to draw your attention to certain special qualities of film and filmstrip that make them different from other visual means of communication such as diagrams and stills. But in doing this I am assuming that for once I can take off my missionary bonnet, put on a hat more to my liking and speak to the converted.

Before I discuss the qualities of films and strip which make it easy to abuse them, may I deal with one or two practical points ?

Films : 16 mm., sound or silent, colour or monochrome non-flam. ; copies cost £12 10s. for 10 minutes sound. Library fees are 7s. 6d. per reel per day ; 10 minutes, one reel ; a cine-projector costs about £250.

Filmstrips : 35 mm., single pictures, still projection, colour or monochrome ; a strip-projector costs about £25. Each strip costs about 15s. with notes.

In any kind of teaching situation at least two things must be borne in mind. These two aspects are the *selection* of the teaching material and the way in which you *use* it. In *Part I* : *Selection*, I am going to show you parts of two films and part of a strip. In *Part II* : *Using*, I am going to show you parts of two films and parts of two strips.

Selection

How do you choose your films and strips ? I suggest that the considerations should be : (1) Audience and place. (2) Teaching aims. (3) Quality of material.

Audience

Let us take a concrete example. Suppose you have to teach Road Safety, you might show the film "*Worth the Risk.*" This is intended to *remind* people of what they already know. It uses shock tactics ; it is intended for an adult audience, who know all about it, who are jaded and tired and will not pay attention to a careful exposition. Alternatively, you could show the filmstrip "*Jack and Jill Learn Road Safety.*" This is intended to teach gently. You have all the intimacy of a classroom ; children can talk and contribute to the development of the story. But both give opportunity for *identification*—an important factor when you are attempting to modify behaviour.

I used those two examples to underline the importance of knowing your audience. The things which you should know about your audience are, I suggest, educational level, motivation, intellectual level, and previous experience of subject.

Now let us consider *the aim*. In general, all teaching is concerned with showing people how to do things : in giving them facts and their relationships, and in establishing attitudes which determine behaviour. I will show you quite a different film. The last one set out to remind people. The film, "*Your Children's Eyes*," sets out to teach some facts and some skills. Your teaching aim is then to convey skills, facts and attitudes.

Finally, when you have decided to *whom* you are going to teach *what*, you have to choose between one film and another or between a strip and a film.

Quality of Material. Assuming such obvious technical items as reasonably good photography, good lighting, adequate drawings, good tone contrast—then the points to bear in mind are visual primacy, familiarity of content, opportunity for identification.

Using Films and Filmstrips

Here I tread on delicate ground, because we all have our own ways of teaching and lecturing ; also there are no rules anywhere on "How to give a perfect lesson." But it is worth formulating what we all know to be basic good sense :—

(1) See that the apparatus works, that you have the films there on time, that the projectionist knows his job, that the strips are wound the right way.

(2) See that you know the film, and especially the strips, thoroughly well, and that you know what points you are going to emphasise.

(3) Remember that preliminary teaching is often essential in order that the audience may be familiar with the items in the film.

For example, the strip "*Elimination*" gives structures, while the film on the same subject shows relationship between known items.

The points can be summed up :—

1. Practical efficiency (blackout, equipment, etc.).
2. Know the material well (see films first, prepare commentary, etc.).
3. Preliminary teaching (familiarity of context).
4. Leadership (introduce, arouse interest, discuss afterwards).

My last point is *Leadership*. However good your teaching material may be, it will not be effective without the "human touch" ; one of the tasks of the teacher in health education is to assume the *role of a leader*, to arouse interest, to stimulate further activities, to encourage people to assume responsibility for health matters. Films and strips can be good vehicles for excellent exposition, but without the leadership of a good teacher, much remains untaught.

*Lecture to the Refresher Course for School Medical Officers, London, September, 1952.

BOOK REVIEWS

The Normal Child in the First Three Years of Life. By R. S. Illingworth, M.D., F.R.C.P., D.P.H. (Pp. 342. Price 30s. net.) London : J. & A. Churchill, Ltd. 1953.

The basis for the study of medicine and surgery is knowledge of the normal anatomy and physiology as it occurs in health before disease is superimposed. Surely it is logical to concede that the study of paediatrics should be based on knowledge of the normal child during its progress of growth and development from birth to maturity. Although omission of this subject is gradually being overcome to some degree in medical training, it has been left to the majority of doctors to acquire this knowledge over years of experience and personal observation. Books on child management and development are legion, but in too many of them outworn ideas and instructions are perpetuated without due thought and foundation of reason.

Prof. Illingworth has now given us a text-book, dealing with the normal child in the first three years of life, which is written with astute knowledge against a background of common sense. What is normal in childhood ? Too many parental anxieties have been accentuated by advisers who lack appreciation of the wide variations in normal child development and behaviour, and by attempts to fit the child into accepted "rules" and "milestones." This book presents a readable picture of normal growth and development of mind and body, and the

normal variations which may cause anxiety to parents and, if improperly managed, suffering to the child.

The first section of the book deals with the all-important problems of infant feeding; why breast-feeding should be encouraged and how it can be accomplished with avoidance of certain difficulties. Demand feeding in the early weeks is viewed with common-sense perspective. In Section 2 on "Physical Problems" the assessment of physical development is discussed with emphasis on individual variations and considerations of the interpretation of measurements of physical growth. Problems of teething and the vexed question of circumcision are dealt with in detail, and a useful chapter is included on the causes and prevention of neo-natal infections and the prevention of certain infectious diseases in early childhood.

Developmental problems are reviewed in Section 3, and the investigations of Gesell and others are quoted at length on the fascinating subject of predictability of intelligence and personality. An account of the normal development during the first three years of life is illustrated by attractive pen and ink sketches of developmental stages of locomotion. The final section describes behaviour problems, because "every normal child has them" and every doctor concerned with children ought to be able to deal with them himself. If this could be achieved there would be fewer referrals to Child Guidance Clinics, because correct management in the early stages would avoid the development of real, and often insoluble, problems in the parent-child relationship.

As the author states in his preface, this book "is intended for all doctors who are concerned with the care of children, especially family doctors and doctors in the Child Welfare Service." To them it is commended for study; every one of its pages is worth reading. Is it too much to hope that Prof. Illingworth will write another book on similar lines about the older child? This would be welcomed.

Dental Surgery and Pathology. By J. F. COLYER, K.B.E., LL.D., F.R.C.S., F.D.S., and EVELYN SPRAWSON, M.C., D.SC., M.R.C.S., L.R.C.P., F.D.S. Ninth edition. (Pp. 1,151. Price 75s. net.) London: Butterworth & Co. (Publishers), Ltd. 1952.

The appearance of a further edition of the text-book on Dental Surgery and Pathology which has for 60 years been associated with the name of J. F. Colyer, at first in collaboration with Morton Smale, then by himself alone, and later in association with Prof. Sprawson, is an event of some importance in the dental world. The much increased size of the present edition will give some indication of the progress which has been made in the art and science of dentistry since 1893, when the first edition appeared. The first edition contained 23 chapters covering 423 pages, whereas its present successor has extended to 38 chapters and 1,151 pages. This new edition, which has been brought thoroughly up to date, is nevertheless well-recognisable member of the "Colyer" family both in form and contents and still preserves a number of the original woodcuts and other material from the first edition. The book contains sections on the treatment of dental disease in children, the prevention of dental caries, gingivvxis in pregnancy, and the treatment of the fractured incisor, all subjects of vital concern to the public health dentist. Fluorosis of the teeth is dealt with and that interesting condition, which affected the teeth of young sheep grazing near the aluminium works at Fort William in Scotland, where the herbage was contaminated by smoke-borne fluorides, is referred to. Attention is called to the advisability of not undertaking dental extractions without a penicillin umbrella in cases with damaged hearts owing to the risk that the transient bacteraemia, which in a large percentage of cases follows such extractions, may bring about a sub-acute bacterial endocarditis. This surely serves to emphasise the desirability of the closest co-operation between the medical and dental practitioner, a liaison which is perhaps more easily maintained in the local authority school health and maternity and child welfare dental services owing to the ready interchange of the case records. There is an entirely new chapter devoted to the uses in dentistry of penicillin and other antibiotics. There is also an excellent chapter on focal infection and remote effects of dental disease.

The present edition is one which we feel confident will commend itself to all who are studying or are engaged in the practice of dentistry. This passage, which was written by Sir Frank Colyer in his preface to the fourth edition in 1919: "True success in dentistry will only have been achieved when preventable dental diseases have ceased to exist," will apply with equal force to-day. Prof. Sprawson, Sir Frank's present collaborator, is a Past-President of the Dental Officers' Group of the Society.

THE SOCIETY OF MEDICAL OFFICERS OF HEALTH

Notices of forthcoming meetings will be found on page v.

REPORTS

Ordinary Meeting

An Ordinary Meeting of the Society was held in the Committee Room on Friday, April 17th, at 12.45 p.m., immediately following the meeting of the General Purposes Committee. The President, Dr. Andrew Topping, was in the chair.

Minutes.—The minutes of the Ordinary Meeting held on Friday, February 20th, 1953, were confirmed and signed by the President.

Elections.—The following candidates, having been duly proposed and seconded, were then elected to membership: Drs. M. H. Braine, J. I. Buchanan, F. F. Burrell, G. Dison, J. D. K. Ferreira, F. W. Ford, F. W. Fox, P. F. M. B. Gould, L. Hahn, P. K. Hearth, F. A. Heimann, S. G. A. Henriques, M. M. Hunter, J. G. Jamieson, R. E. Jones, D. W. Kirk, K. Kolaczek, E. W. M. Korn, H. E. Knott, L. A. Knowlson, S. Lindsay, M. B. McCann, A. M. McFarlan, H. M. Rajamanikkam, P. Shaw, A. L. Shennan, O. W. Williams and P. Duffield, Esq., B.D.S.

Life Membership.—The following were elected fully-paid life members of the Society on the nomination of the Council and of their Branches: Drs. H. M. Halliday, W. Parker, J. M. Hermon, H. Vallow and A. D. Campbell.

Several nominations for the next election were reported and the meeting then terminated.

EAST ANGLIAN BRANCH

President: Dr. K. J. Grant (M.O.H., Great Yarmouth C.B.).
Hon. Secretary: Dr. A. J. Rae (Dep. C.M.O.H., West Suffolk).

A meeting was held at the Grange Restaurant and Country Club, Brome, on Saturday, January 17th, 1953, at 3 p.m. The President was in the chair and 20 members and visitors were present.

Medicine in America—with Special Reference to the Public Health Service

Captain H. H. Osborne, Base Surgeon, U.S.A.F. (M.C.), and Captain J. L. Garrison, Army Surgeon, U.S.A., had kindly come from the United States Air Force Base, Lakenheath, to address the meeting on this subject.

Captain Osborne informed the Branch that he had been employed in military medicine throughout his professional career, but that he had derived his knowledge of the American public health system by close contacts with other people who were employed there. He first described the United States Public Health Service which is financed by the United States Treasury. It carries out large investigations and mass surveys on infectious disease and also on chronic diseases, recent examples being diabetes, heart disease and cancer. It also carries out health surveys in factories and is responsible for trying out new drugs which are placed on the market and publishing reports on them. Marine hospitals also come under the administration of this service.

Captain Osborne then emphasised that each state in the United States was a sovereign state and had its own public health service financed by its own treasury and not answerable to the United States Public Health Service. The details of the service varied greatly from state to state and were usually adapted to meet the particular needs of the people in that state. The head of the service, although a doctor, had usually political associations. The service provided clinics which were staffed by general practitioners who volunteered their services free of charge in the clinics. The clinics were attended mainly by poorer people who could not afford private medical attention, and treatment at these clinics or at state hospitals was free of charge.

In addition to the state public health services larger cities had their own public health services.

Dr. Garrison described practice in the state of Indiana, where he was the only doctor for a population in a small town and surrounding rural area totalling about 3,000. With regard to indigent people, there was a system whereby home visits could be paid to them at the public expense, but many doctors treated poor people without sending in a bill. He also took part in the work of the state public health department which was closely associated with the state medical school. There were 92 counties in the state and the counties had county health offices with a County Health Commissioner and staff.

Mention was made of the fact that there were four types of hospitals in America—the Marine hospitals run by the United States Public Health Service, the State-owned Hospitals run by

the individual states, hospitals set up by such counties and cities as wished to do so, and hospitals run by private organisations, mostly the Church, a very few of which were run for profit.

There were State sanitary inspectors and social workers but no health visitors as such, all public health nurses being engaged in curative work either in the hospitals or in the homes under the direction of the general practitioners. "Well baby" clinics and ante- and post-natal clinics existed and like the curative clinics were staffed by general practitioners on a voluntary basis. These clinics were attended by the less satisfactory type of person and were often held at hospitals. Nearly all deliveries were conducted by doctors in hospitals, although there were a few country doctors who went to the people's homes. In some states there were still a few women roughly corresponding to midwives, but no new ones were being allowed to practise. Each state, if it wished to do so, made its own arrangements for the medical inspection of school children, which was usually carried out by the general practitioners.

Many questions were asked by members, all of which either Captain Osborne or Captain Garrison was able to answer, in spite of the fact that neither of them was primarily engaged in the public health service.

The minutes of the previous meeting were confirmed and signed. It was decided that Dr. A. E. Brown's report on Research Projects should be discussed at the next meeting, to be held on April 11th, and that this should also include, if possible, a visit to some place of interest.

MIDLAND BRANCH

President: Dr. H. M. Cohen (S.M.O., Birmingham C.B.).
Acting Hon. Secretary: Dr. Jean M. Mackintosh (Sen. M.O., M. & C.W., Birmingham C.B.).

The fourth meeting of the session was held at Lancaster Street Welfare Centre, Birmingham, on Thursday, February 5th, 1953, at 3 p.m. The President was in the chair and 33 members attended.

The minutes of the third sessional meeting held on January 15th, 1953, were read and confirmed.

Arising out of the minutes, the Hon. Secretary reported that although the Midland Tuberculosis Society were originally a sub-group of the main Tuberculosis Group, the membership had increased and it now embraced consultants, chest physicians and surgeons, as well as local authority tuberculosis officers, not all of whom were members of the Society of Medical Officers of Health. There was a reciprocal arrangement between the Midland Branch and the Tuberculosis Society that each could nominate a member to the Council of the other. No condition had been laid down as to membership. On the other hand, the Midland Branch could also nominate two of their members to serve on the Council of the Tuberculosis Group of the Society in London. At present Dr. Geddes represented the Branch and there was one vacancy. The Hon. Secretary was instructed to write to the Midland Tuberculosis Society pointing out the advantage of members of the Society also being members of the Society of Medical Officers of Health.

Addresses were given by the following:—

Dr. Green—Aspects of Clinical Work in Infant Welfare Centres.

Dr. Stephens—Is there a future for the School Medical Officer?

Dr. Done—Ante-natal Care—by whom?

Dr. Owen—The Family Doctor.

Dr. Green observed that advice at Welfare Centres is sought for two reasons only—the parent thinks that there is something wrong which requires treatment and/or she wishes to know what is going to happen to her child. It is for the second reason that advice is usually sought though mothers will often admit only to a quest for treatment. To see the whole child in relation to its physical and mental surroundings and to give the required prognostic opinion in terms of all the circumstances of life and not just patient and disease calls for a very high standard of clinical skill. This attitude towards families and individuals is peculiar to the public health service, and has within it the greatest possibilities of the advancement of medicine for the benefit of humanity. At the same time, unless the standard of clinical work in welfare centres is maintained at least at the same level that is found in the local paediatric service, it is inevitable that the public health personal services should be supplanted by the Regional Hospital Services—with incalculable but not wholly beneficial effect upon the community. At the same time he fully appreciated the value of welding hospital, infant welfare and practitioner services into one, even though their administration remains fairly separate. Dr. Green illustrated his thesis by describing an investigation which he carried out in association with the family practitioner and with the advice of the consultant paediatrician on the development of the alarm and adaptation reaction in infants with particular reference to the help which some infants may require before the normal reaction is fully established.

Dr. Stephens spoke of the many disappointments and frustrations encountered by the School Medical Officer in the course of his duties, of the monotony of routine medical inspections and of the appalling conditions under which he may be asked to work. The Service had changed little in the past 40 years. School medical work should be more closely connected with paediatrics and maternity and child welfare work with obstetrics. The dividing line between the two would be more preferable at one or two years rather than at five years. Combined regional hospital board and local authority appointments should be given a more extensive trial. Dr. Stephens saw no reason why Registrar, Junior Hospital Medical Officer and Senior Hospital Medical Officer appointments could not be combined successfully with local authority work in a similar manner to the tuberculosis service. Surely this would be preferable to filling in the gaps in local authority programmes with uninterested part-time assistants. He considered that the nurse should form the basis of the service and be employed full-time. Her training should be radically diffrent from that of a health visitor and it would be wise to recruit newly qualified inexperienced nurses with a leaning towards social work. The use of fully trained health visitors for school medical inspections is very wasteful. More attention should be paid in the D.P.H. Course to preventive and positive school health. The C.P.H. does not serve any useful purpose except possibly for M. & C.W. Officers to whom the D.R.C.O.G. would be more valuable. The C.P.H. should be used as a teaching course for school medical officers and should include preventive orthopaedics, cerebral palsy, B.C.G., audiometer testing, speech therapy and health education in schools in the curriculum. Only with improved training will the quality of the work of the school medical officer be improved and his status in the eyes of other branches of the profession improve.

Dr. Done said that there is probably still too much rather casual and inadequate ante-natal supervision. The introduction of the municipal midwifery service and the linking up with local authority clinics was a big advance in the midwifery services of this country. Criticisms directed against the success of the system should be directed against inadequate organisation of the system. Any ante-natal service, which does not arrange to see patients regularly and frequently, follow up defaulters closely, which cannot have patients supervised between clinic days, if necessary by midwives, will fail. Attention must also be paid to the general health education of mothers. Before the appointed day there appeared to be a potentially satisfactory maternity service. The criticism that the clinic medical officer was not on call for emergencies was only valid to a limited degree. Provided the ante-natal medical officer got reports on the outcome of the cases there was sufficient evidence to judge whether or not ante-natal decisions had or had not been justified. It should not be possible, however, for the doctor called in to have no knowledge of the patient. On the other hand the ideal absolute continuity of care throughout pregnancy, labour and puerperium is impossible to obtain. This is also the case in hospital obstetrics. Dr. Done suggested that as the National Health Service required that patients should be seen by the general practitioner twice—once for a general medical examination early in pregnancy and on the second occasion late in pregnancy to sort out abnormalities—the intermediate ante-natal care should be given at local authority clinics. There midwives can come into close contact with the patients who are also under medical supervision, so that competent reports can be sent to the patient's doctor. Relief midwives can get to know the patients and health visitors have an opportunity to carry out educational work. It is something of a myth that women in general can have adequate continuous care from conception to the end of the puerperium by the family doctor. The plan suggested might be a basic interim scheme until the ideal, upon which no one can at present agree, is really evolved.

Dr. Owen gave a most interesting account of his observations made at two infant welfare centres in Smethwick on the proportion of families who were attended by one general practitioner only. His survey related to 305 families. Of these, 154 (50%) had a family doctor, i.e. husband, wife and children were all registered with the same medical practitioner. In the remaining 152 families, in 22 cases the members were registered with different doctors in the same partnership and in that sense could claim to have a family doctor, while the other 130 families, i.e. 42·6% of the total number, had no family doctor in any sense of the term. Considering these 130 families in more detail it was found

that 11 families claimed the services of three doctors, and in 119 families there were two doctors. In this group of 119 families, in 107 families the children were registered with the mother's doctor, and in seven families with the father's doctor. In the remaining five families one or more children had a different doctor from the parents or else one child was under the father's doctor and one under the mother's doctor. Dr. Owen pointed out that this is only a small survey in a densely populated urban area in Staffordshire with parents mostly in the earlier years of married life, and in general of the same social class. None would be in R.G. Group I. The findings of such a survey in other types of community would be of interest, but if it is true of urban areas as a whole that only 50% of the population have family doctors, then the term is meaningless.

These papers were followed by discussion in which seven members took part.

A vote of thanks to the speakers was proposed by Dr. Lawson and seconded by Dr. Elizabeth Findlay.

NORTH-WESTERN BRANCH

President : Dr. K. K. Wood (M.O.H., Bury C.B.).

Hon. Secretary : Dr. J. S. G. Burnett (M.O.H., Preston C.B.).

An ordinary meeting of the Branch was held at the Liverpool School of Hygiene, Mount Pleasant, on Friday, March 13th, 1953, at 3 p.m., when 21 members and guests attended.

It was announced that four nominations for the Presidency of the Society for the session 1953–54 had been received by the Secretary of the Society, including the name of Dr. C. Metcalfe Brown nominated by the North-Western Branch.

Members were advised that the Central Council for Health Education was holding a week-end seminar in London on "Health Education in a Sanitary Authority" during the week-end preceding the annual conference of the Royal Sanitary Institute. Leaflets dealing with the seminar were made available to interested members.

The meeting was then addressed by Dr. R. Bradbury, B.A. (HONS. ARCH.), M.SC., PH.D., F.R.I.B.A., A.M.T.P.I., City Architect and Director of Housing, on "Slum Clearance in Liverpool." (This address and the subsequent discussion will be recorded in a subsequent issue of PUBLIC HEALTH.

WELSH BRANCH

President : Dr. A. Trevor Jones (S.A.M.O., Welsh Regional Hospital Board).

Hon. Secretary : Dr. R. T. Bevan (Dep. M.O.H., Glamorgan)

A meeting of the Branch was held at B.M.A. House on December 5th, 1952, when there were 22 members and four visitors present.

The President presented Mr. Hutchinson, a medical student of the Welsh National School of Medicine, with the Society's Hygiene Prize for 1952. The President then welcomed Dr. Greenwood Wilson, the speaker for the meeting, who gave an address on his tour of the United States of America.

After describing his first reactions to America, Dr. Greenwood Wilson explained that he had visited seven universities and had taken part in several seminars. One of the favourite topics in these seminars had been the Cardiff scheme for health visitors. He pointed out that an almost identical scheme was in being in Toronto. Health visitors in Canada were frequently employed as social workers, and in some places they carried out duties in hospitals which in this country are commonly regarded as the functions of hospital almoners. He had also visited 14 local health departments as well as the Central Health Department at Washington.

Dr. Greenwood Wilson had been impressed by the manner in which the teaching of preventive medicine had been integrated with the clinical teaching in medical schools. He sensed, in fact, that there was a greater integration of the whole medical profession in the United States as compared with this country. The working of specialty boards was commented upon, and doctors in the public health field could be designated by these boards as specialists just as doctors in other branches of medicine. The boards were set up by the American medical profession. In the United States great stress was placed on research, and a 1,000-bedded hospital in Washington was under construction for the purpose of studying chronic disease.

The American public was exceedingly health conscious and very ready to accept new ideas for the promotion of health. Dr. Greenwood Wilson illustrated by lantern slides the technique of health propaganda in the U.S.A.

Details were given of the New York Health Insurance Plan whereby a comprehensive treatment scheme at model health centres and including hospital treatment was available at a cost of the equivalent of £1 per week per family. Normally the employer paid half this amount, but in some instances a larger proportion, and occasionally all.

A tumour clinic was described which provided a free diagnostic service. Dr. Greenwood Wilson also spoke of the special concessions which were given to veterans in respect of housing and hospital and medical services.

In proposing a vote of thanks to the speaker, Professor Picken thought his own impressions of America had been very similar to those of Dr. Greenwood Wilson, although there had been a lapse of many years since he had visited the States. Professor Picken remarked that the Society had come to expect addresses from Dr. Greenwood Wilson which were not only of interest but very instructive and this address was no exception. Dr. Kathleen Davies seconded the vote of thanks.

The Branch conveyed their congratulations to Dr. Greenwood Wilson in that he had been elected an Honorary Fellow of the American Public Health Association.

A meeting of the Branch was held at B.M.A. House, Cardiff, on February 13th, 1953, when there were 16 members present.

The President welcomed Mr. S. K. Brown, the Headmaster of Bryn-y-Don School, who addressed the meeting on this subject.

Mr. Brown said that the first impression one had of the boys in his approved school was that they were the same as any other group of boys—active and boisterous. Why therefore had these boys been involved in trouble at the Juvenile Courts? What parts had their heredity and their environment played in causing their admission to an approved school?

The boy could be dismissed as a first offender, a fine could be imposed, he could be placed under probation or sent to an approved school. It was usual that it was not until the fourth or fifth appearance in court that the boy was sent to an approved school. Mr. Brown pointed out that the boy must be at least eight years of age before he could be brought before a court, and that this in some respects led to difficulties. On being committed to an approved school, the boy was first of all sent to a classifying school, where he stayed for one to three weeks. While there he was under observation and note was made of his mental and physical condition.

The outstanding feature in the boys was their unsettled home background. It was not uncommon for one parent to be absent due to separation of parents or the death of one. Mr. Brown was of the opinion that lack of home security was a vital factor in the cause of juvenile delinquency.

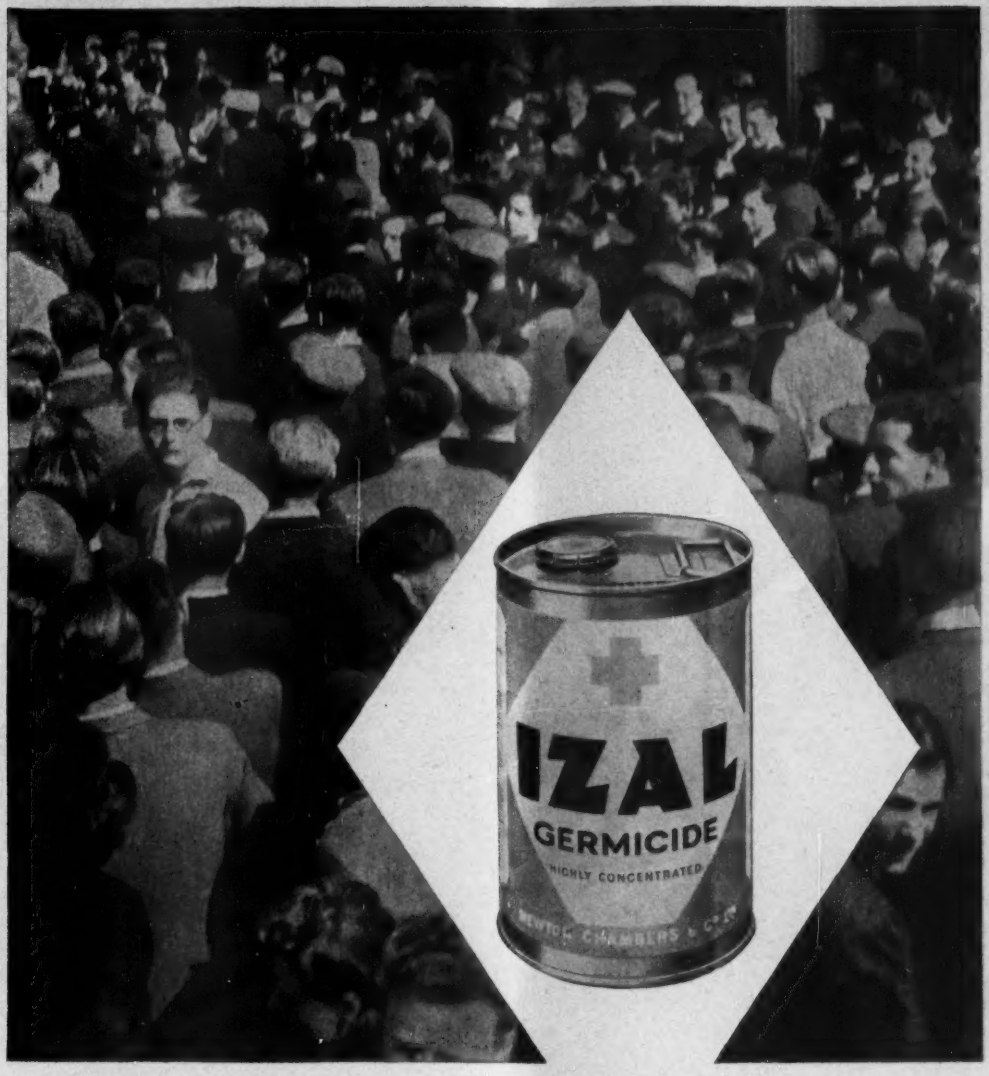
The aim of approved school was to provide the fullest education, having due regard to the abilities and aptitudes of the boy. It was important that, at first, the scholastic training should be a little below the boy's standard. Early success gave the boy encouragement. It was estimated that 20% of the boys were illiterate on admission, and it was essential that there should be special classes for the dull and backward. Mr. Brown was of the opinion that illiteracy was a sequel to delinquency and not *vice versa*. Truancy from school often resulted in illiteracy. Emphasis was placed on practical subjects in the school training. Hobbies of all sorts were encouraged, and it was important to have a close association with the social activities in the neighbourhood, *e.g.*, local churches, scouts, etc. The old-fashioned regimentation in approved schools had been eliminated. It was possible, however, to provide care and affection without adopting a sloppy, sentimental approach. The emphasis was on the winning of privileges rather than on any punishments. There was, however, a place for the use of corporal punishment in isolated cases.

Absconding was not such an important problem in a junior approved school, but it had a nuisance effect and was infectious. If a boy absconded he lost conduct marks and this resulted in a reduction of his home leave. This was normally an effective deterrent.

Mr. Brown then described a number of typical case histories, pointing out the importance of the home background. Physical disabilities were sometimes of significance. The puny, undersized boy was more likely to be vicious.

In answer to questions during the discussion period, Mr. Brown said that in his opinion the ideal size of an approved school would be for 48 boys. He described in detail the after-care scheme, which in fact commenced as soon as the boy was admitted to the school. He expressed the view that the provision of a hostel would be invaluable for boys whose home backgrounds were such that they should not return to their own homes.

Dr. C. W. Anderson proposed and Dr. McKim Thomas seconded a vote of thanks to the speaker for an outstandingly interesting and instructive evening.



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Printed by H. R. Grubb, Ltd., Croydon, and Published by The Society of Medical Officers of Health, Tavistock House South, Tavistock Square, W.C.1.